

UNITED STATES DISTRICT COURT
NORTHERN DISTRICT OF OHIO
EASTERN DIVISION

CURT & NANCY COOLEY,	:	Case No. 1:05-CV-17734
	:	
Plaintiffs,	:	
	:	
v.	:	
	:	
LINCOLN ELECTRIC CO., et al.,	:	
	:	
Defendants	:	Judge Kathleen M. O'Malley
	:	
	:	<u>MEMORANDUM & ORDER</u>
	:	

The parties in this case filed dozens of pretrial motions seeking to exclude various types of testimony and evidence. The Court issued written orders setting forth rulings on a few of these motions before trial. Due mostly to time constraints, however, the Court simply delivered oral rulings on the majority of these motions during the course of a multi-day final pretrial conference. At that time, the Court promised to later issue a written opinion documenting and explaining further its more important or complex oral rulings.¹ This is the promised opinion.

For the reasons stated during the final pretrial conference and during the trial itself, and also for the reasons set out below, the Court ruled as follows on these pretrial motions and evidentiary issues:

¹ This Order addresses only a small subset of the Court's rulings on the parties' many pretrial motions. Documentation of other such rulings may be found in written Orders at *Cooley* docket nos. 212, 215, and 219, and also in the transcript of the pretrial conference (Sept. 1-4, 2009).

- **Plaintiffs' Motion to Limit the Epidemiology Testimony of Defense Expert Dr. Brent (dkt. no. 97) – GRANTED IN PART.**

In his expert report, defense expert toxicologist Dr. Jeffrey Brent offered the opinion, among others, that about 30 epidemiological studies had all failed to find any association between exposure to welding fumes and manganese neurotoxicity. Essentially, Dr. Brent opined that, despite the existence of numerous studies designed to uncover a link between exposures to various toxins (including welding fumes) and brain damage, there is an “absence of evidence” that welders suffer parkinsonism at rates greater than the rest of the population. Although the plaintiffs disagreed with Dr. Brent’s interpretation of the results of some of these studies (and also asserted there were methodological weaknesses in most of the studies’ analyses), the plaintiffs did not object to the admissibility of this aspect of Dr. Brent’s proposed testimony.

Dr. Brent also sought to go further and opine, however, that, because these epidemiological studies (especially when viewed cumulatively and in combination) failed to show a statistically significant association between neuro-injury and welding fume exposure, the studies provide evidence that the *actual* risk is “infinitesimally small” and surely below 0.4%. Plaintiffs objected strongly to this opinion, arguing that Dr. Brent could offer this opinion only if he undertook a thorough “power analysis” of all of the studies, which he did not do. Plaintiffs argued that, unless Dr. Brent could show the studies were powerful enough to actually *unearth* a link between welding fume exposure and brain damage (if it exists), he had no basis to opine that the studies actually show there is *no* risk – as this Court has observed, “[w]hen a study fails to find a statistically significant association, an important question is whether the result tends to exonerate the agent’s toxicity or is essentially inconclusive with regard to toxicity,’ due to lack of

sufficient statistical power.”² Put more simply, although plaintiffs conceded Dr. Brent could opine that there is an *absence of evidence* that welders suffer parkinsonism at greater rates than the rest of the population, plaintiffs insisted there was no reliable basis for Dr. Brent to testify there is *evidence of an absence* of such an association.

In addition to receipt of substantial pretrial briefing regarding precisely what opinions Dr. Brent proposed to offer and the allowable scope of his testimony, the Court heard extensive argument from the parties on this subject at the final pretrial conference.³ This discussion was complex, but the result may be simplified to this extent: the Court concluded that: (1) it appeared Dr. Brent was seeking to “testify in a way that is different and more extreme than any other epidemiologist” who has appeared before the Court in any *Welding Fume* case;⁴ (2) absent some sort of mathematical examination of the power of the 30 studies upon which he relied,⁵ Dr. Brent had no basis to opine that the studies showed a certain level of actual risk of suffering brain damage due to welding fume exposure; and (3) at least some of Dr. Brent’s

² *In re Welding Fume Prods. Liab. Litig.*, 2005 WL 1868046 at *33 n.76 (N.D. Ohio Aug. 8, 2005) (quoting *Reference Manual on Scientific Evidence* at 336).

³ See *Cooley* pretrial hrg. at 113-31 (Sept. 1, 2009).

⁴ *Id.* at 121.

⁵ It is unclear whether this sort of examination would require a statistical meta-analysis of the studies’ confidence intervals, or a post-hoc power calculation for each study, or some other technique. But it certainly required more than what Dr. Brent performed, which was ultimately more a formation of a subjective impression of the entirety of the studies’ results than it was a quantitative assessment: “given that all of these studies, using different methodologies and done in different places, yield results showing no association between fume exposure and neuro-injury, and given the confidence intervals in all of those studies, I conclude that there is, in fact, an extremely low risk of suffering neuro-injury from fume exposure.”

To be admissible, this opinion must have much more of a mathematical underpinning than bare reference to “confidence intervals.” At least some of the studies’ confidence intervals were very wide – for example, the “Danish Study” confidence interval was 0.1 - 3.5, which is consistent with the existence of high, actual risk of neuro-injury from welding fume exposure. Thus, the objective basis for Dr. Brent’s conclusion is, at best, not clear.

opinions which were purportedly explaining the “absence of evidence” sounded a lot like opinions that, in fact, there was “evidence of absence.” This last conclusion led the Court to declare it would have to draw careful evidentiary lines regarding admissibility before Dr. Brent took the stand. Accordingly, the Court stated it would voir dire Dr. Brent outside the presence of the jury before he presented his testimony in open court.⁶

Ultimately, defendants chose not to call Dr. Brent as a witness, so the voir dire did not take place. Thus, the Court cannot set out here its ultimate conclusions regarding those precise opinions Dr. Brent sought to offer that did and did not satisfy the *Daubert* standards. The Court’s rulings and observations at the final pretrial conference, however, continue to stand for the proposition that it will not allow any witness to opine that epidemiological studies (whether examined singly or in combination) are evidence of an absence of an association between welding fume exposure and neurological injury, unless the witness has performed a methodologically reliable analysis supporting such a conclusion.

⁶ The Court’s approach on *Daubert*-related issues has been consistent throughout this MDL, which is to say the Court has been careful to ensure that every aspect of every expert opinion is undergirded by a reliable methodology. While the Court is not charged with assessing the relative strength of the parties’ proposed scientific evidence, the Court has attempted to assure that the parties’ experts proffer only admissible opinions. Whenever any party challenges the admissibility of an expert opinion, the Court’s normal course is to read the expert’s deposition testimony in its entirety, read at least the principal studies and articles upon which the expert relies, and often hear from the expert outside the presence of the jury. Over the course of presiding over weeks of MDL-wide *Daubert* hearings on “core” experts, ruling on many dozens of overlapping *Daubert* motions filed in seven bellwether trials, and hearing these experts testify before juries, the Court has achieved an unusually thorough understanding of the parties’ experts’ subject matters and methodologies. *See Cooley* pretrial tr. at 257-60 (Sept. 2, 2009) (describing this history).

- **Plaintiffs' Motion to Limit the Testimony of Defense Expert Neuro-Psychologist Dr. Stebbins (dkt. no. 174) – GRANTED IN PART.⁷**

Plaintiff Cooley underwent two different neuropsychological examinations. Defense expert Dr. Glenn Stebbins reviewed the test results and the assessments of the doctors who gave those examinations, and then submitted an expert report offering the following opinions: (1) Cooley's "most recent neuropsychological examination is within normal limits, and does not provide any specific evidence of cognitive impairments;" further, his testing revealed no "deficit cognitive behaviors that are associated with damage to the basal ganglia, such as impairments in executive function and/or working memory;" (2) Cooley's test performance "[did] not support of [sic] a finding of any cognitive impairment due to his reported manganese fume exposure;" and (3) more broadly, a review of the scientific literature shows "there is not a consistent pattern of neuropsychological impairments resulting from exposure to welding fumes containing manganese."⁸

Because defendants filed Dr. Stebbins' expert report after the deadline, plaintiffs moved to exclude all of his opinions. The Special Master ruled there was a valid excuse for the lateness of Stebbins' opinions' related to assessment of the neuropsychological tests – that is, there was an unavoidable delay in third-party production of the underlying test data. There was no excuse, however, for the lateness of Dr. Stebbins' broader opinions that manganese exposure does not yield a certain pattern of mental impairment, or that the medical literature does not support a claim that neuropsychiatric injury is caused by manganese fume exposure. Accordingly, the Special Master ruled that the second and third opinions

⁷ See Cooley pretrial tr. at 370-74 (Sept. 9, 2009).

⁸ Stebbins' report at 3-4.

listed above were not admissible at trial.⁹ The parties did not subsequently seek clarification from the Court or otherwise challenge any aspect of the Special Master's ruling, and adhered to the ruling at trial.

Subsequently, the plaintiffs also challenged the admissibility of one facet of Dr. Stebbins' opinions interpreting Cooley's neuropsychological test results. In deposition, Dr. Stebbins suggested it was possible to determine Cooley's "premorbid" neuropsychological performance – that is, what Cooley's test performance would have been before he was ever exposed to welding fumes. This technique of "backward prediction" first requires a generalized assessment of the level of success a person has enjoyed in life – in particular, at school and in his job. Then, based on an understanding of the skills and types of intelligence a person would normally need to obtain this level of success, the neuropsychologist can hypothesize what kind of cognitive ability the patient had, and, thus, what the patient's neuropsychological test results would have been before he suffered any alleged neurological injury. Dr. Stebbins stated he had performed this analysis and concluded there was no real difference between Cooley's actual neuropsychological performance and what his hypothesized premorbid performance would have been.

Plaintiffs asserted Dr. Stebbins should not be allowed to offer opinions suggesting what Cooley's

⁹ Specifically, after consulting with the undersigned, the Special Master ruled as follows, via email to the parties:

Because Dr. Stebbins was waiting on neuropsych data, there was an excuse for his not providing opinions regarding Cooley's test results and performance. But there was no excuse for his failure to timely provide opinions regarding whether the medical literature supports a claim of neuropsychiatric injury from manganese, or that manganese exposure does or does not yield a certain pattern of impairment, or that injury to the basal ganglia does or does not yield a certain pattern of impairment (more accurately, there was no valid excuse for [defense] counsel's failure to respond in any way to [plaintiff's counsel's] request for a timely report on these issues, and there was real prejudice flowing from this failure).

[Thus,] Stebbins may opine ONLY on what the test results show regarding Cooley's neuropsychological performance and whether and how he is impaired, and not whether that pattern of performance or impairment may be associated with manganese exposure, or correlated with any patterns discussed in the literature.

pre-morbidity intelligence was, because Dr. Stebbins: (1) did not include any premorbidity opinions in his expert report; and (2) stated in deposition he had not undertaken a premorbidity intelligence estimate. Further, plaintiffs argued that, although Dr. Stebbins later stated in deposition that he had, after all, done a premorbidity analysis “in his head,” the methodology he used to do so was flawed (e.g., he did not take into account Cooley’s supervisory experience, which would suggest a higher expected premorbid IQ).

The Court found all of plaintiff’s arguments well-taken. Even the most lenient and open interpretation of the opinions Dr. Stebbins included in his report does not allow a conclusion that he opined about Cooley’s premorbid intelligence. Indeed, the term “premorbidity” appears nowhere in the written report. Having failed to offer these opinions in his written report, Dr. Stebbins was not allowed to offer them at trial.

More important, however, is that the methodology Dr. Stebbins purportedly used to support his ultimate opinion is flawed. Dr. Stebbins sought to testify that: (1) Cooley’s post-morbid neuropsychology intelligence test scores are in the range of “average”;¹⁰ (2) having assessed Cooley’s performance in school and on the job, he would expect Cooley’s premorbid test scores also to be in the “average” range; and (3) accordingly, Cooley suffered no decrease in neuropsychological functioning, nor any other impairment to his intelligence, following his exposure to welding fumes. In other words, Cooley’s expected premorbid scores were the same as his actual post-morbid scores, so his welding fume exposure did not cause any neuro-psychological harm.

This analysis suffers in two principal ways. First, the essence of Dr. Stebbins’ premorbidity intelligence estimate appears to be: “Cooley was a welder, not a doctor, so I expect his premorbid scores

¹⁰ Dr. Stebbins opines: “the fact that [Cooley’s] test results ranged from low-average to high-average is within the expected variability associated with normal performance, evidencing individual strengths and weaknesses in cognitive abilities.” Report at 3.

to be average.” Neither Dr. Stebbins nor defendants offer any other, more sophisticated reasoning or analysis to support this estimate. Given the huge range of human intelligence, and the multitude of obvious factors that confound a smoothly correlative relationship between intelligence, education level, and career choice, this is simply not a rigorous methodology worthy of admission under the *Daubert* standard.

Second, Dr. Stebbins was forced to concede that, even assuming Cooley’s scores were “average” before he was exposed to welding fumes, this did not necessarily mean Cooley suffered no impairment. As defendants explained, “Dr. Stebbins has not purported to testify whether Mr. Cooley’s cognitive abilities have moved *within the broad range of ‘average’* – only that he estimates that Mr. Cooley was in the ‘average’ range prior to his alleged injury and that neuropsychological testing today shows he is still in the average range.”¹¹ In other words, Cooley’s test results could have dropped 20 points following welding fume exposure, from high-average to low-average, and Dr. Stebbins would still have the same opinion.

¹¹ Reply brief at 10 (emphasis added). Although defendants offered this explanation in their briefing, Dr. Stebbins repeatedly refused to concede this same point in deposition, to the point of sidestepping simple yes-or-no questions:

- Q. True or false, you can testify that Mr. Cooley has not suffered an impairment to his intelligence?
- A. I can testify that given the data from the [neuropsychological] exams of Dr. Houston and Dr. Smith, he is performing within the average range of performance where we would expect him to be.

Depo. at 159. Of course, this response, like many others, was evasive and did not answer the question posed. Despite Dr. Stebbins’ pertinaciousness, plaintiffs’ counsel finally wrung a concession:

- Q. Show me where it says in your report that Mr. Cooley is the same today in these domains as he was in the [1990s].
- A. I don’t say that in my report.
- Q. And you can’t say that, right?
- A. Yeah, I don’t say that in my report.
- Q. And you can’t?
- A. Right. It is not in my report. I do not have that specifically listed in my report.

Id. at 174.

Ultimately, Dr. Stebbins' premorbidity opinions offered nothing of value to a jury. He could say only that Cooley's post-morbid scores fell within the average range, when compared to the general population, and he could offer weak support for the conjecture that Cooley's premorbid scores would also have been average. But Dr. Stebbins certainly offered no reliable methodology to support the assertion that Cooley's post-morbid scores were the same – not lower – than they would have been had Cooley not suffered manganese exposure. Accordingly, the Court granted plaintiffs' motion to exclude Dr. Stebbins' premorbidity opinions at trial in their entirety.

- **Defendants' Motion to Limit the Testimony of Dr. Hartley (dkt. no. 85) – DENIED.**
- **Defendants' Motion to Limit the Testimony of Dr. O'Shea (dkt. no. 88) – GRANTED IN PART.**
- **Defendants' Motion to Limit the Testimony of Dr. Sharma (dkt. no. 90) – DENIED.**
- **Defendants' Motion to Limit the Testimony of Dr. Worrell (dkt. no. 91) – DENIED.**

Cooley sought to present at trial the testimony of four of his treating physicians: (1) his family doctor, Dr. John O'Shea (Dr. O'Shea ordered a blood test for Cooley in December of 2002, and the results showed high manganese levels); (2) Dr. Nitin Sharma, Cooley's first neurologist (following the blood test, Cooley met with Dr. Sharma, who diagnosed Cooley with manganese toxicity); (3) Dr. James Worrell, another neurologist (after Dr. Sharma moved to a different town, Cooley began seeing Dr. Worrell, who also reached a diagnosis of manganese toxicity); and (4) Dr. Patrick Hartley, an occupational medicine specialist (Dr. Worrell teamed with Dr. Hartley to treat Cooley, and Dr. Hartley also diagnosed manganese toxicity). The Court heard extended argument during the pretrial conference on defendants' motions to limit the testimony from these four doctors.¹²

In particular, defendants sought to exclude the testimony of all four treating doctors regarding a

¹² See *Cooley* pretrial tr. at 40-113 (Sept. 1, 2009).

common topic – their diagnoses of manganese neurotoxicity. Defendants asserted two primary grounds for this argument. First, defendants argued the doctors’ diagnosis did not meet *Daubert* standards because: (1) Cooley’s doctors notably did *not* diagnose him as suffering from parkinsonism, because they did not observe at least two of the four classical parkinsonian symptoms;¹³ and (2) there is no such thing as manganese neurotoxicity in the absence of parkinsonian symptoms. Essentially, defendants argued that neurological damage caused by manganese exposure always appears as a parkinsonian syndrome, and a diagnosis of manganese neurotoxicity in a patient who is not parkinsonian is inadmissible “junk science.”

The Court concluded this argument was not well-taken.¹⁴ As an initial matter, the Court noted that it was questionable whether *Daubert* standards applied to the medical diagnostic testimony of Cooley’s treating doctors’ at all, since Cooley offered the doctors as fact witnesses, not experts, and the doctors’ references to the potential cause of Cooley’s condition was integral to, and not independent of their diagnosis and treatment decisions. Given that Cooley “did not retain [the treaters] for the purposes of providing expert testimony,” and that the doctors “formed their opinions as to causation at the time [of treatment]” – before any litigation had begun – and did so for the purpose of determining the appropriate

¹³ The classical symptoms are: (1) “rest tremor,” meaning an involuntary quiver of a body part while it is at rest; (2) “bradykinesia,” meaning general slowness of movement, including paralysis; (3) “rigidity,” meaning stiffness or inflexibility; and (4) “postural instability,” meaning loss of normal postural reflexes, and/or a hunched, flexed posture.

¹⁴ See Cooley pretrial tr. at 257-74 (delivering rulings on all of these motions).

course of treatment, case law suggests *Daubert* does not apply.¹⁵ Out of caution, however, the Court did examine the four doctors' diagnosis testimony for admissibility under *Daubert*. This examination revealed that, in fact, some of *defendants*' own neurologist experts have stated that manganese exposure can lead to neurotoxicity with either parkinsonian *or* non-parkinsonian manifestations. For example, defense expert neurologist Dr. Anthony Lang testified in the MDL bellwether case of *Tamraz* that “[y]ou can have manganism in the earliest stages – for example, a miner who presents with manganese madness – who may not have Parkinsonism, but still has manganism and will develop manganese-induced Parkinsonism.”¹⁶ Similarly, defense expert Dr. Warren Olanow has written that manganese neurotoxicity can appear in phases, and the initial phase is marked by non-specific symptoms of the very sort that Cooley complained

¹⁵ There is a meaningful distinction between causation testimony that is, and is not, central to treatment determinations. For instance, a treating physician generally does not need to know what caused a patient's broken arm to determine proper treatment for that injury. In contrast, knowing whether a patient's neurological condition was caused by a toxin, as opposed to something else, *does* alter the course of treatment the physician will prescribe. Causation testimony from the first physician would fall outside his role as a fact witness, while similar testimony from the second physician falls squarely within his proper role and function at trial. *See Fielden v. CSX Transp., Inc.*, 482 F.3d 866, 869-70 (6th Cir. 2007) (holding that Fed. R. Civ. P. 26(a)(2)(B) “does not require an expert report from a treating physician” even though the doctor “testif[ied] regarding causation,” especially when “opinions about the cause of an injury are a necessary part of the patient's treatment”). *See also Perkins v. Origin Medsystems, Inc.*, 299 F.Supp.2d 45, 55 n.18 (D. Conn. 2004) (“[a] treating physician can testify as a fact witness about the care and diagnosis rendered as part of a plaintiff's treatment”).

In *Gass v. Marriott Hotel Services, Inc.*, 558 F.3d 419, 426 (6th Cir. 2009), the Sixth Circuit stated that, “[g]enerally, a treating physician may provide expert testimony regarding a patient's illness, the appropriate diagnosis for that illness, and the cause of the illness,” and this expert testimony must meet *Daubert* standards. But a physician's testimony about his treatment and diagnosis of a patient is certainly not *automatically* expert testimony, which is why the *Gass* court affirmed the trial court's decision to admit testimony of diagnosis and treatment for pesticide exposure, but exclude specific causation opinions regarding precisely *which* pesticide caused the plaintiff's illness, or where and when the exposure occurred. *Id.* at 426-27 n.4 & 428.

¹⁶ *Tamraz* Lang depo. at 155 (Oct. 3, 2007) (*Cooley* dkt. no. 153 exh. D).

of, which are not the classic markers of a parkinsonian syndrome.¹⁷

Further, various publications issued by independent organizations support the proposition – which underlies Cooley’s treating doctors’ diagnoses – that the clinical signs of manganese neurotoxicity may or may not include parkinsonian symptoms. For example, the American Conference of Governmental Industrial Hygienists (“ACGIH”) recently published a draft “notice of intended change (NIC)” to lower the existing Threshold Limit Value (“TLV”) for respirable manganese by 90%. The NIC notes there is “a severe form of chronic manganese poisoning” that “clinically resembles Parkinson’s Disease,” but suggests the TLV should be lowered because chronic manganese exposure can also lead to a range of more subtle neurobehavioral and neuropsychological deficits that do not amount to parkinsonism. Similarly, an article discussing toxic manganese exposures states that “[a] variety of neurobehavioral manifestations may precede the development of extrapyramidal signs and symptoms.”¹⁸ The Court found this medical literature “surely would support a reasonable conclusion by a qualified treating physician that there is a form of diagnosis of manganese toxicity that does not necessarily require a conclusion that a Parkinson’s syndrome must accompany it.”¹⁹

Defendants’ second ground for exclusion of the doctors’ diagnoses of manganese neurotoxicity

¹⁷ N. Chu, F. Hochberg, D. Calne, & C. Olanow, *Neurotoxicology of Manganese* at 94-95, found in L. Chang & R. Dyer, *Handbook of Neurotoxicology* (Cooley dkt. no. 153 exh. E) (“The initial symptoms are usually subjective and nonspecific, and may include fatigue, anorexia, headache, poor memory, reduced concentration, apathy, lumbago, insomnia, diminished libido, somnolence, muscle aches and cramps, and generalized slowing of movements. These symptoms vary a great deal from patient to patient and may appear in any combination and in any order.”).

¹⁸ N. Kumar, “Industrial and Environmental Toxins,” in *Continuum: Lifelong Learning in Neurology* 102, 119 (Oct. 2008) (Cooley dkt. no. 153 exh. H).

¹⁹ Cooley pretrial tr. at 266 (Oct. 2, 2009).

was that none of the four doctors engaged in a proper “differential diagnosis,”²⁰ and/or were unqualified to render a neurological diagnosis. Plaintiffs responded that each doctor did, in fact, undertake a differential diagnosis using an acceptable methodology, and each doctor was qualified to do so. At the pretrial hearing, defendants essentially conceded that the two neurologists, Drs. Sharma and Worrell, had engaged in a differential diagnosis and were qualified to render their diagnostic opinions, but defendants maintained their position on both objections regarding Drs. O’Shea and Hartley.

To resolve these issues, the Court read both the discovery and trial deposition transcripts of all four doctors. The Court’s review was directed at ensuring each doctor was qualified to and had, in fact, reached a “reliable and admissible” differential diagnosis, using the three-prong test set out by the Sixth Circuit Court of Appeals in *Best v. Lowe’s Home Centers, Inc.*²¹ This test requires that the doctor: (1) objectively ascertains, to the extent possible, the nature of the patient’s injury, (2) “rules in” one or more causes of the injury using a valid methodology, and (3) engages in standard diagnostic techniques by

²⁰ “‘Differential diagnosis’ refers to the process by which a physician ‘rules in’ all scientifically plausible causes of the plaintiff’s injury. The physician then ‘rules out’ the least plausible causes of injury until the most likely cause remains. The remaining cause is the expert’s conclusion.” *Hollander v. Sandoz Pharmaceuticals Corp.*, 289 F.3d 1193, 1209 (10th Cir. 2002); *see Best v. Lowe’s Home Centers, Inc.*, 563 F.3d 171, 178-180 (6th Cir. 2009) (discussing what factors make a differential diagnosis reliable).

Defendants argued both that: (1) *any* differential diagnosis of manganese neurotoxicity absent parkinsonian symptoms is unreliable; and (2) even if this diagnosis can be reliable, each doctor simply did not engage in a full and reliable methodology. The former argument is coterminous with defendants’ first ground for exclusion, discussed above.

²¹ 563 F.3d 171 (6th Cir. 2009). In *Best*, unlike in this case, the treating physician was also tendered as the plaintiff’s expert. The *Best* court “recognize[d] differential diagnosis as ‘an appropriate method for making a determination of causation for an individual instance of disease’”, *id.* at 178, and reversed the trial court for excluding the treating doctor’s diagnosis. The diagnosis in *Best* was fairly simple: “In short, because of the temporal relationship between Best’s exposure to the chemical and the onset of his symptoms, in conjunction with a principled effort to eliminate other possible causes of anosmia, Dr. Moreno formed the opinion that the inhalation of Aqua EZ caused Best to lose his sense of smell.” *Id.* at 176.

which doctors normally rule out alternative causes to reach a conclusion as to which cause is most likely.²²

In connection with the third prong, “doctors need not rule out every conceivable cause in order for their differential-diagnosis-based opinions to be admissible.”²³

The testimony of Drs. Worrell, Hartley, and Sharma all revealed fairly careful, critical, thorough – and independent – analyses of what were Cooley’s symptoms, what were the possible causes, and what was the most likely explanation. As these three doctors recognized themselves, their analyses were certainly not iron-clad, and were susceptible to cross-examination, but the methodology they used satisfied Fed. R. Civ. P. 703 and *Daubert*. As noted above, defendants essentially conceded at the pretrial hearing that the two neurologists, Drs. Sharma and Worrell, had engaged in a differential diagnosis, and were qualified to render their diagnostic opinions.²⁴ The testimony of these two neurologists left no doubt that they had, in fact, used normal medical tests to determine the nature of Cooley’s injury and symptoms, used a valid methodology to “rule in” manganese neurotoxicity as a possible cause of his injury and symptoms, and employed standard neurological diagnostic techniques to “rule out” less likely alternative causes, thus reaching a conclusion as to the most-likely cause. Further, these two neurologists were clearly qualified to diagnose neurological injury and to identify different types of neurological injury.

The Court examined more carefully the testimony of Dr. Hartley, who is a pulmonologist and

²² *Id.* at 179 (citing *In re Paoli Railroad Yard PCB Litigation*, 35 F.3d 717 (3rd Cir.1994))

²³ *Id.* at 181. On the other hand, if the doctor “engage[s] in very few standard diagnostic techniques by which doctors normally rule out alternative causes,” the doctor must offer a good explanation as to why his or her conclusions remain reliable.” *Id.* at 179 (internal quotation marks omitted).

²⁴ See *Cooley* pretrial tr. at 41 (Sept. 9, 2001) (defendants not offering argument as to these two doctors).

occupational medicine specialist.²⁵ Although Dr. Hartley had reviewed the diagnoses of the two neurologists, he did not merely adopt them – he undertook his own tests to assure himself those diagnoses were valid, and to ensure the treatment he provided to Cooley was consonant with the correct diagnosis. Further, even though Dr. Hartley did not specialize in neurology, his testimony made clear he was qualified to undertake neurologic examination, to recognize injury caused by workplace toxins, and to test the validity of the diagnoses that Drs. Sharma and Worrell had made earlier.²⁶ For these reasons, the Court overruled defendants' motions to exclude testimony related to the diagnoses of Drs. Worrell, Hartley, and Sharma.

The Court could not say the same, however, for Dr. O'Shea. First, unlike the three others, Dr. O'Shea practices generalized family medicine – he had no specialized expertise in diagnosing neurological illness, or in recognizing syndromes caused by workplace toxins. Second, Dr. O'Shea testified, essentially, that his diagnosis of manganese toxicity was premised entirely on the opinions of the other three doctors; he did not undertake any additional physical examination or medical testing or even questioning of Cooley, on his own, directed at determining the cause of Cooley's neurological symptoms. Although Dr. O'Shea did oversee Cooley's continuing care and even prescribed some of the drugs Cooley took to alleviate his neurological problems, this medical care was still premised on diagnoses reached by the other doctors. Certainly, Dr. O'Shea's actions and decisions regarding Cooley's treatment were not inappropriate, but Dr. O'Shea offered no *independent* basis to offer testimony of his *own* differential

²⁵ See Cooley pretrial tr. at 272-73 (Sept. 10, 2001).

²⁶ This Court has rejected the defendants' narrow view regarding the degree of expertise necessary to render diagnostic opinions in this area. A neurologist does not need to have a sub-specialty in movement disorders before he has sufficient qualifications to reach a differential diagnosis of manganese neurotoxicity, nor does a physician specializing in occupational medicine need to have a sub-specialty in neurology before he is qualified under *Daubert* to reach the same diagnosis.

diagnosis. Providing medical care to a patient in reliance on other specialists' diagnoses is proper, but offering testimony to a jury solely to endorse the opinions of those specialists is not.²⁷

Accordingly, the Court sustained in part defendants' motion and limited Dr. O'Shea's testimony to the facts surrounding his provision of Cooley's medical treatment; Dr. O'Shea was not permitted to offer opinions regarding the cause of Cooley's neurological condition. The Court denied the defendants' motions to limit the testimony of the other three doctors.

- **Plaintiffs' Motion to Preclude Dr. Watts from Diagnosing Ruth based only on Video Review (dkt. no. 84) – GRANTED.²⁸**
- **Plaintiffs' Motion to Limit the Testimony of Dr. Watts's Autopsy-Based Criticisms of Dr. Nausieda (dkt. no. 96) – GRANTED.²⁹**

Defense expert Dr. Ray Watts is a neurologist specializing in movement disorders; he diagnosed Cooley as suffering from (a) essential tremor, combined with (b) a psychogenic gait disorder. Plaintiffs sought to preclude Dr. Watts from offering two sets of opinions.

First, plaintiffs sought to limit Dr. Watts from offering any opinion that Charles Ruth – who is another MDL welder-plaintiff, whose case settled – did not suffer from Manganese-Induced Parkinsonism (“MIP”). Ruth’s circumstances are generally relevant in this case because: (1) he was the subject of a peer-reviewed medical article (“the Sadek article”) that concluded Ruth had MIP; (2) defendants’ neurology experts subsequently agreed Ruth had MIP; and (3) defendants’ experts in *Ruth* concluded Ruth’s exposures to welding fumes were generally low. Thus, Ruth’s circumstances tend to show that

²⁷ *Ash Grove Cement Co. v. Employers Ins. of Wausau*, 246 F.R.D. 656, 661 (D. Kan. 2007) (a witness “may not simply parrot or recite the opinions and knowledge of other expert and fact witnesses”).

²⁸ See *Cooley* pretrial tr. at 283-84 (Sept. 9, 2009).

²⁹ See *Cooley* pretrial tr. at 276-83 (Sept. 9, 2009).

career welders exposed to relatively low levels of fumes can get MIP, and their symptoms and disease progression may differ from patients with “classic manganism.”

In his expert report, Dr. Watts offered no opinions regarding Ruth. Nonetheless, plaintiffs asked Dr. Watts in deposition about Ruth, the Sadek article, and whether Dr. Watts believed Ruth had MIP. Plaintiffs did so because Dr. Watts had earlier opined, essentially, that he believes *no* welder can get – or has *ever* gotten – MIP simply from welding fume exposure; accordingly, plaintiffs wanted Dr. Watts to explain the circumstances of Ruth. In response to plaintiffs’ questioning, Dr. Watts responded he had viewed two videotapes of Ruth – one of Ruth’s medical examination, and one of him testifying in Court – and he believed Ruth does not have MIP nor, indeed, any form of organic parkinsonism. Rather, the videos suggested to Dr. Watts that Ruth may have psychogenic tremor. Dr. Watts conceded he would need to examine Ruth to know for sure, but he opined (in response to plaintiffs’ questioning) that the best diagnosis he could give would be that, just like plaintiff Cooley, Ruth does *not* have MIP – and that this was consistent with his opinion that no welder has ever gotten MIP from welding fume exposure.

Plaintiffs asked the Court to exclude this testimony, pointing out that every doctor who actually examined Ruth (including defendants’ own expert, Dr. Olanow) had, at the very least, diagnosed Ruth as having an *organic* parkinsonism (as opposed to a psychogenic disorder); further, defense expert Dr. Lang, a world leader in the field of psychogenic movement disorders, has testified that Ruth is a credible case of MIP. Moreover, defendants’ own experts (Drs. Lang and Hurtig) have testified that a neurologist cannot and should not diagnose a patient simply by viewing a videotape, especially in the context of reaching a differential diagnostic choice between organic and pscyhogenic tremor. Thus, plaintiffs concluded, Dr. Watts should be precluded from offering a “videotape diagnosis,” opining that Ruth had a psychogenic disorder and not MIP.

In response, defendants argued that the entire subject matter of Ruth's diagnosis should not be admitted but that, if plaintiffs were allowed to ask Dr. Watts about Ruth, the Sadek article, and what Dr. Lang had to say about Ruth, then Dr. Watts should be allowed to answer that he disagrees with Dr. Lang and explain why. Essentially, defendants asserted that, having asked the questions, plaintiffs could not object to Dr. Watts's answers on *Daubert* grounds.

The Court concluded, however, that plaintiffs' motion to exclude this aspect of Dr. Watts's opinions was well-taken. Dr. Watts's testimony must satisfy *Daubert*, regardless of whether it is offered on direct or cross-examination. Even if Dr. Watts would opine only on cross-examination that "the videotapes show Ruth does not have MIP," this opinion is not premised upon any accepted scientific or medical methodology. Because Dr. Watts's diagnostic opinions regarding the nature of Ruth's movement disorder do not satisfy the legal standard, the Court ruled they must be excluded from trial. While Dr. Watts might have another admissible basis upon which he could disagree with Dr. Lang or Dr. Sadek, he could not premise that disagreement solely on his analysis of the videotapes.

The second set of Dr. Watts's opinions that plaintiffs sought to exclude involved his criticisms of plaintiffs' expert neurologist, Dr. Nausieda. As this Court discussed in detail in its "*Evidentiary Order*,"³⁰ defendants have sought, in other MDL bellwether cases, to attack Dr. Nausieda's credibility by identifying instances where he diagnosed a welder with MIP, but was subsequently proved wrong. Specifically, in earlier MDL bellwether trials, defendants proffered testimony from neuropathologist Dr. Daniel Perl regarding the autopsy results of four patients whom Dr. Nausieda had diagnosed with MIP. Dr. Perl asserted the pathological examination of the brain tissue from these patients (known as Bolatto, Edwin, Patricia, and Bassham) confirmed they each suffered from other forms of parkinsonism and *not* MIP.

³⁰ See master docket no. 2217 at 47-49 (Aug. 31, 2009).

In its *Evidentiary Order*, the Court held, among other things, that neuropathological evidence regarding the type of disease suffered by patients diagnosed by Dr. Nausieda as having MIP is relevant and admissible; however, defendants' expert neuropathologist, Dr. Perl could not offer pure litigation-related opinions based on hearsay pathology reports. Specifically, the Court concluded that: (1) Dr. Perl could testify regarding his *own* neuropathology findings on Bollato; but (2) Dr. Perl could not testify about the *hearsay* neuropathology reports on any other patients where he did not perform the autopsy himself (or, to put it differently, he could not "simply regurgitate" the hearsay autopsy reports of others).

Returning to this case, despite the Court's previous ruling in the *Evidentiary Order*, defendants asked that Dr. Watts be allowed to discuss the hearsay autopsy results in Bollato and Edwin. To reach this result, defendants asserted a new argument: the "hearsay" autopsies of these two patients are actually business records upon which Dr. Watts is allowed to rely. Defendants cited a number of cases where autopsy reports were, in fact, admitted as business records pursuant to Fed. R. Evid. 803(6).

The Court denied defendants' motion, however, noting that all of these cases involved autopsies performed by independent coroners or medical examiners.³¹ It is one thing to admit, as a business record, evidence of an autopsy done in the normal course of government activity (such as by a coroner), and entirely another to admit autopsy results or interpretations performed by a well-paid defense expert for litigation purposes. It is "[a]n employer's *independent motivation* for creating and maintaining reliable business records [that] obviates the need for sworn testimony and cross-examination," which otherwise

³¹ See, e.g., *United States v. Feliz*, 467 F.3d 227, 237 (2nd Cir. 2006) (government used autopsies performed by New York Medical Examiner to prove defendant conspired to commit homicide); *Wood v. Valley Forge Life Ins. Co.*, 478 F.3d 941, 945-46 (8th Cir. 2007) (official coroner's autopsy report admitted as evidence in trial over insurance proceeds).

normally must support admission of a document.³² Allowing defense expert Dr. Watts to discuss defense expert Dr. Perl's autopsy results of Bollato would be to ignore the requirement that the author of the autopsy have a motivation for reliability independent of the litigation. The same is true regarding Dr. Watts's proposed discussion of some other unknown pathologist's non-official autopsy results of Edwin. Accordingly, the Court granted plaintiffs' motion to limit Dr. Watts's testimony regarding autopsies of Dr. Nausieda's patients.

Finally, in addition to the two larger issues discussed above, plaintiffs sought to preclude Dr. Watts from offering at trial a variety of statements he had made in deposition. Plaintiffs argued these statements were all outside the scope of Dr. Watts's knowledge, or otherwise inadmissible. The Court ruled on these statements as follows:³³

- a. Statement: "Dr. Jankovic wrote his 2005 review article on 'Manganese and Parkinson's Disease' for the *Journal of Neurology* at the invitation of the editor in chief." Plaintiffs argued Dr. Watts could not know about any "invitation" except through hearsay. Defendants responded that Dr. Watts has served on the editorial review board of two medical journals and knows what an "invited review" article is and how it is conceived. The Court denied the motion to exclude.
- b. Statement: "My examinations of Cooley and other plaintiff-welders were 'independent' medical exams." Plaintiffs did not like the adjective; defendants noted it is commonly used in case-law and in Fed. R. Civ. P. 35 itself. The Court denied the motion to exclude.
- c. Statement: Various negative characterizations of Dr. Nausieda. Plaintiffs sought to exclude Dr. Watts's "derogatory comments" about Dr. Nausieda. Defendants responded that Dr. Watts should be allowed to "provide his strongly-worded, unequivocal disagreement with Dr. Nausieda's professional reputation and diagnostic abilities." The Court made clear that any such "disagreement" expressed by Dr. Watts must be limited to contrary medical opinions or assessment of fact; any *ad hominem* attacks pointed at Dr. Nausieda or any other witness would lead to

³² *Cobbins v. Tennessee Dept. of Transp.*, 566 F.3d 582, 588 (6th Cir. 2009).

³³ See *Cooley* pretrial tr. at 327-31 (Sept. 2, 2009).

immediate termination of Dr. Watts's testimony.³⁴

- d. Statement: "Cooley is not disabled." The defendants did not oppose this aspect of plaintiffs' motion, agreeing Dr. Watts would not opine about whether Cooley was disabled and could not work.
- e. Statement: "Some welders-patients of mine have asked about legal advertisements asserting that welding fume exposure can cause brain damage." Plaintiffs noted the Court has repeatedly limited all witnesses and attorneys from referring to legal advertising. Defendants nonetheless opposed this motion, stating plaintiffs had asked Dr. Watts whether he would inform his own welder-patients that welding fumes contain manganese and can cause brain damage, and Dr. Watts's answer is that he has seen welder-patients who bring in legal advertising flyers about manganese exposure and parkinsonism. The Court granted the motion to exclude, concluding Dr. Watts's answer referring to the advertisement was non-responsive and was clearly aimed at referring to matters the Court has addressed and excluded repeatedly in other trials.
- f. Statement: "Cooley asked for a manganese blood test only because of his 'recently-acquired information regarding the welding fume litigation.'" Plaintiffs asserted this was just another back-door attempt by defendants to refer to advertising. The Court agreed and further found it was not an accurate statement of fact, either; accordingly, the motion was granted.

- **Defendants' Motion in Limine to Exclude Reference to "Historical Documents" (dkt. no. 112) – DENIED.³⁵**

In every MDL bellwether trial, the defendants have moved to exclude a number of documents they refer to as "historical," meaning the documents were created before the plaintiff started welding. Defendants consistently assert these documents are too remote in time to be relevant; and, even if relevant, they are more prejudicial than probative. The Court has repeatedly denied these motions, and repeatedly

³⁴ This is consistent with a long-standing policy employed by the Court in this MDL. *See Order at 1 (May 17, 2006) (master docket no. 1792) (addressing the parties' *ad hominem* comments about opposing expert witnesses and "mak[ing] clear that, from this point forward, if counsel in this litigation makes, or directs others to make, any public comment denigrating an opposing attorney or opposing witness, the Court will impose a sanction upon counsel")* (emphasis in original).

³⁵ *See Cooley* pretrial tr. at 387 (Sept. 4, 2009).

explained its reasoning.³⁶ Recently, the Court entered an “*Evidentiary Ruling*” memorializing, in summary form, its prior rulings on this “historical document” issue (as well as many other issues).³⁷ Of course, the Court’s reasoning and conclusions, as set out in the *Evidentiary Ruling*, apply to every MDL bellwether trial, including the *Cooley* case.

Given the urgency with which the defendants continued to press their arguments that the “historical documents” should not be admitted in *Cooley*, the Court adds the following observations and explanation (which, again, apply not only to *Cooley*, but also to every MDL bellwether trial).

The gravamen of every *Welding Fume* plaintiff’s complaint is that the manufacturing defendants failed to warn him that inhaling welding fumes could cause brain damage. Each plaintiff asserts the defendants failed to adequately warn of hazards they knew, or should have known, existed. Thus, there is no more central or relevant evidence in these *Welding Fume* cases than the fact of, and the defendants’ level and timing of knowledge regarding, the existence of this hazard. So, too, are the defendants’ decisions on whether and how to warn about such hazards at the core of all *Welding Fume* cases.

As such, a document that tends to show, for example, that a defendant knew in 1940 that exposure to welding fumes can cause brain damage is highly relevant; the fact that the document was created before the plaintiff was ever exposed to welding fumes does not reduce the document’s relevance. To the contrary, the document is arguably *more* probative given its age, because it shows the defendant knew of the hazard in time to craft a meaningful warning for the plaintiff, *before* the plaintiff suffered his first welding fume exposure. Indeed, the longer a defendant has knowledge of a hazard but fails to warn new

³⁶ See, e.g., *Ruth v. A.O. Smith Corp.*, 615 F.Supp.2d 648 (N.D. Ohio 2005); *Byers* pretrial tr. at 250 (Oct. 22, 2008); *Tamraz* pretrial tr. at 16-18 (Nov. 1, 2007).

The Court’s most thorough oral explanation of its reasoning is found at *Jowers* pretrial tr. at 47-53 (Jan. 23, 2008).

³⁷ See *Evidentiary Order* at 56-59 (master docket no. 2217).

product-users, the more culpable the defendant arguably may be.³⁸

This Court has concluded that the “historical documents” to which defendants object are all relevant to show one of more of the following matters, which are clearly relevant in every *Welding Fume* case:

- (1) The extent of defendants’ changing knowledge over time that exposure to manganese in welding fumes could lead to neurological injury. Defendants and their experts have asserted, in different *Welding Fume* trials and motions, that exposure to manganese in welding fumes (a) simply cannot cause neurological injury at all, or (b) can cause neurological injury but only in extreme circumstances. Thus, documents that show whether and the extent to which manganese in welding fumes can cause neurological injury, and/or show defendants’ knowledge thereof, are certainly

³⁸ Thus, the three cases cited by defendants, where the court excluded evidence as too distant in time, are inapposite. The key issue in this *warning* case is defendants’ knowledge of the hazard; the fact that the defendant may have gained this knowledge long ago does not make the evidence irrelevant or prejudicial. None of the three cases cited by defendants involved warnings, and none of the excluded evidence in those cases was clearly and directly relevant to defendants’ knowledge. *See Chertkova v. Conn. Gen. Life Ins. Co.*, 2000 WL 349277, at *4 (2nd Cir. Apr. 4, 2000) (upholding exclusion of evidence of “inappropriate sexual behavior” by plaintiff’s boss that occurred 11 years earlier, where plaintiff did not complain of boss’s sexual behavior toward her); *Hicks v. Six Flags Over Mid-America*, 821 F.2d 1311, 1315-16 (8th Cir. 1987) (upholding exclusion of evidence of purportedly similar accident involving a tamper tool that occurred six years earlier (but allowing evidence of two other, more-recent, similar accidents)); *In re Air Crash Disaster at Sioux City, Iowa*, 1991 WL 279005 at *6 (N.D. Ill. Dec. 26, 1991) (excluding evidence of four purportedly similar incidents because they were dissimilar or remote in time, but admitting one similar incident that was not dissimilar or remote in time).

It also bears noting that the historical documents are not made irrelevant by the fact that defendants did begin to issue warnings about welding fumes in 1967. Plaintiffs have consistently argued that: (1) all of defendants’ warnings, from 1967 on, are insufficient because they do not convey critical hazard information about which defendants had earlier known for years; (2) defendants knew how to give sufficient warnings, but purposefully chose not to; and (3) defendants’ failure to provide timely warnings diluted any later warning they did provide. The historical documents are relevant to these arguments, as well. Whether the issue is complete absence of warning or insufficiency of warning, documents showing the manufacturer’s knowledge of the extent of a hazard and the effect a given warning might have on ameliorating that hazard are relevant.

relevant, regardless of the documents' age. Further, defendants have asserted that, if welding fumes do cause neurological injury, the injury the fumes cause is not Parkinson's Disease, and the injury the fumes cause is distinguishable from Parkinson's Disease. Thus, documents that show whether and to what extent the defendants had knowledge that symptoms of neurological injury caused by welding fumes resemble symptoms of Parkinson's Disease are relevant, regardless of the documents' age. The Court has also concluded that all of these documents are relevant regardless of which welding product the document is addressing – that is, even if the plaintiff never used "welding rod X," a document that shows a defendant knew that brain damage could be caused by manganese in welding fumes emitted by "welding rod X" is relevant, because defendants knew that virtually *every* welding rod emitted *some* amount of manganese in the fume. That a document addresses certain welding rods and not others goes to its weight, not its admissibility.³⁹

- (2) Defendants' knowledge over time regarding the effects that giving or failing to give warnings would have on their own business, their competition, their welder-product-users (who might be

³⁹ See, e.g., Airco/BOC memorandum from F. Saacke to members of Safe Practices Committee (Dec. 7, 1950) (trial exh. 407). Among other things, this memorandum: (1) recognizes "the allowable safe limit for manganese" set by OSHA in 1948 as being "6 milligrams per cubic meter of air," which is 30 times the current OSHA limit; (2) recommends that, in light of this limit, a warning be placed on certain high-manganese welding rods; and (3) states the recommendation for warning is made "despite the possible loss of electrode sales, since it is believed that . . . the degree of hazard involved in arc-welding high manganese steels might subject the company to possible claims for damages that could far exceed any loss of sales that a frank Warning Label might create." Defendant BOC ignored the recommendation and added no warning.

There is no question but that this evidence is relevant to the defendants' knowledge of the existence of the hazard of manganese in welding fume, the costs and benefits of using warnings generally, and to their subsequent decisions of whether and how to warn about manganese in welding fumes. Further, the Court has concluded that the document's high probative value outweighs any possible prejudice (and that any prejudice may also be mitigated by defendants through explanation at trial of the context of the document), so that the document is admissible under Fed. R. Civ. P. 403. Indeed, whenever this document is introduced at trial, the Court always provides an instruction to the jury noting that it is discussing a product that the plaintiff did not use. *See Cooley* trial tr. at 520, 541-42 (Sept. 16, 2009).

sophisticated users), employers of those welders (who might be learned intermediaries), and other industry participants. The Court has also sometimes concluded that these documents are relevant even if the warning being discussed in the document is not specifically related to *manganese* in welding fumes. For example, plaintiffs have introduced a document for the purpose of showing:

(a) a defendant believed *fluoride* in welding fumes was hazardous, so that a warning might be appropriate, (b) the defendant decided not to warn welders of the *fluoride* hazard because it would lose business, and (c) the defendant made this decision during a period in time that the defendant was also learning or had learned that *manganese* in welding fumes was hazardous.⁴⁰ This document is centrally relevant to defendants' knowledge of the efficacy and necessity of giving a warning about welding fumes, the possible and probable results of giving (and not giving) such

⁴⁰ See Airco/BOC memorandum from I. Yates to F. Saacke at 1 (Oct. 25, 1949) (trial exh. 220). Among other things, this memorandum notes that: (1) "the arc welding industry at one time desired to take every precaution to guard against injury, and the NEMA [National Electrical Manufacturers Association] section decided to incorporate a warning [regarding fluoride in fumes] on all electrode box labels," but (2) all welding rod manufacturers eventually dropped the NEMA warning because (a) they felt a competitive disadvantage over those manufacturers who refused to use a warning, and/or (b) they believed the warning amounted to "an admission . . . that the [welding rod] coating under certain conditions might possibly cause injury," thus giving support to welders seeking "to recover damages."

There is no question but that these statements are highly relevant to the defendants' knowledge of fume toxicity, the costs and benefits of using warnings generally, and to their subsequent decisions of whether and how to warn about manganese in welding fumes. The document also gives context to other documents discussing the various hazards of welding fume exposure, including both fluoride and manganese, and also touches on the state-of-the-art of warnings (a topic consistently discussed by the parties' experts).

Further, the Court has concluded that this document's high probative value outweighs any possible prejudice (and that any prejudice may also be mitigated by defendants thorough explanation at trial of the context of the document), so that the document is admissible under Fed. R. Civ. P. 403. Indeed, both plaintiffs and defendants are always careful at trial to note that the document is discussing warnings regarding fluoride and not manganese. *See, e.g.*, Cooley trial tr. at 2344, 2370 (Sept. 25, 2009). Also, defendants have argued the document is prejudicial because it improperly suggests a "tendency" not to warn. Even accepting this as true, the Court remains convinced that any such prejudice is outweighed by the document's high probative value.

a warning, and the defendants' state of mind when deciding whether to warn; further, the document helps explain subsequent actions taken by the defendants when they returned to the subject of whether to warn about manganese, in particular, and also gives context to documents discussing the relative degrees of hazard posed by manganese and fluoride in welding fumes. Again, that a document written by a defendant, which discusses whether to warn about welding fumes, does not address manganese in welding fumes specifically goes to its weight, not its admissibility.

- (3) Defendants' involvement with setting or controlling industry standards relating to manganese in welding fumes. Defendants have often interposed the government contractor defense, the essence of which is that the government was "both knowledgeable and concerned about the contents of the . . . warnings" used by the defendants and exercised its discretion to approve the warnings.⁴¹ Documents showing the interplay and relationship between the defendants and the government when the U.S. Navy and OSHA adopted the defendants' already-existing warnings are thus relevant, regardless of the documents' age, since the documents evidence the government's level of knowledge and degree of discretion. In addition, defendants have argued in all *Welding Fume* cases that their adherence to government and industry warning standards proves both that their warnings were adequate and that they should not be liable for punitive damages. Thus, documents tending to show the defendants controlled or manipulated what those standards would be are relevant and admissible, regardless of the documents' age.
- (4) The extent to which, over time, defendants supplied to welders and their employers all of defendants' knowledge regarding welding fume hazards. Defendants have interposed the sophisticated user and learned intermediary defenses, the essence of which is that the end-user-

⁴¹ *Tate v. Boeing Helicopters*, 140 F.3d 654, 658 (6th Cir. 1998).

welders and their employers already knew (or should have known) about the hazard of manganese in welding fumes. Thus, documents tending to show that defendants withheld from welders and their employers information that defendants knew or should have known about this hazard (or that defendants misrepresented to welders and their employers the nature of this hazard) are relevant, regardless of the documents' age.

- (5) The historical context within which the defendants made their decisions to warn or not. The evidence in *Welding Fume* cases has consistently been that welding is a trade, that welders learn this trade from other, more-senior welders, and that much of a welder's knowledge of the hazards of welding comes from these fellow welders. Further, plaintiffs in *Welding Fume* cases have offered expert testimony showing that the adequacy of a warning may depend in part on the content of previously-existing warnings; for example, (a) warning language regarding a particular hazard might need to be stronger if earlier warnings had suggested the product did *not* pose that hazard, and (b) a minor change in the wording of a long-existing warning might more easily go unnoticed and unheeded. Plaintiffs assert the entire welding rod industry, including defendants, historically represented that exposure to welding fumes was *not* hazardous, and this history changed the extent of their current duty to warn. Thus, historic documents showing the defendants' knowledge of the effectiveness of earlier warnings, and knowledge that changes to their warnings would or would not ensure adequate penetration of "new" hazard information into the welding community (including both welders and their employers), are relevant, regardless of the documents' age.

and

- (6) Whether defendants' decisions to warn *vel non* were made with the requisite *mens rea* to justify

an award of punitive damages.

Finally, the Court recapitulates here its reasoning regarding the admissibility and relevance of these historical documents as to *each* of the defendants, individually. In certain cases, an individual defendant asserts that a given historical document is not relevant or admissible *as against it individually*, because there is no proof that it received the document or was aware that it existed. Indeed, some of the historical documents are a non-defendant manufacturer's internal memoranda; thus, for example, Hobart might argue that a memorandum written by one Lincoln Electric employee to another is not admissible in a trial where Hobart is a defendant but Lincoln Electric is not. Similarly, ESAB might argue that letters exchanged between Lincoln Electric and the American Welding Society are not admissible in a trial where ESAB is a defendant but Lincoln Electric is not.

To begin, the Court has always agreed with defendants that an internal document of a non-party that does not add anything of evidentiary value regarding the state of industry knowledge, and is relevant only to internal thought processes or individual "bad intentions," generally will not be admissible against other parties.⁴² In other words, if a document is relevant only to show a specific manufacturer's *mens rea*, and thus whether exemplary damages might be appropriate as to that manufacturer if it were a defendant, then the document will *not* be relevant or admissible as against other defendants.

As to many of the historical documents plaintiffs have proffered, however, the Court has overruled the defendants' objections and allowed reference to the documents at trial. The Court has allowed reference to historical documents if they are relevant to show the state of industry knowledge of the warnings issues outlined in paragraphs numbered one through six above. For example, a document that shows Lincoln Electric had knowledge in 1940 that welding fume exposure might, could, or did cause a

⁴² *Ruth v. A.O. Smith Corp.*, 615 F.Supp.2d 648, 652 (N.D. Ohio 2005).

welder to suffer neurological injury is also relevant to show that Hobart knew or should have known the same thing. This principle is recognized repeatedly in well-established case law, particularly where, as here, the evidence strongly supports the conclusion that the industry operated collectively with respect to its warnings decisions.⁴³ Generally, these cases explain that documents produced by non-party manufacturers may be relevant in a case against a defendant manufacturer in the same industry, even if the documents are purely internal materials. The reason is that these documents may support an inference that, given the state of the art, defendant-members of the industry had, or should have had (given their duty to have the knowledge and skill of an expert), the same understanding with respect to possible injury to users of their product, and/or the adequacy of warnings in connection with such dangers, and/or the state of relevant medico-scientific knowledge.⁴⁴ In other words, evidence regarding a *non-party* manufacturer's knowledge of: (a) risks posed by its product, (b) the efficacy of its warnings, (c) the level of knowledge of employers and product-users, and (d) medical and scientific knowledge related to toxins emitted by its product, may be relevant to the *defendant* manufacturer's knowledge on those issues, as well.

This inference is strengthened by other historical documents that show many inter-relationships between and among different welding rod manufacturers. There has been substantial evidence adduced at the several *Welding Fume* MDL bellwether trials showing that welding rod manufacturers shared membership at various times in certain trade organizations, such as the American Welding Society and

⁴³ *Gonzalez v. Digital Equipment Corp.*, 8 F.Supp.2d 194 (E.D.N.Y. 1998); *Dartez v. Fibreboard Corp.*, 765 F.2d 456 (5th Cir. 1985); and *Borel v. Fiberboard Paper Prods. Corp.*, 493 F.2d 1076 (6th Cir. 1973).

In *Welding Fume* cases, of course, all of the defendant welding rod manufacturers used virtually identical warnings, acting in lockstep. Thus, defendants, themselves, have referred in *Welding Fume* trials to the warnings they all used as "the 1967 warning" or "the 1979 warning."

⁴⁴ See *Ruth v. A.O. Smith Corp.*, 615 F.Supp.2d 648 (N.D. Ohio 2005). The Court incorporates herein the result and reasoning of this *Ruth* opinion, by reference.

the National Electrical Manufacturers Association, and that these trade organizations frequently discussed issues central to *Welding Fume* cases (such as whether manganese in welding fumes can cause neurological injury, and whether and how to warn about it). Thus, there is evidence that, as a matter of course, the manufacturers *were* actually sharing relevant knowledge regarding welding fume hazard and warning adequacy. Even if there is no evidence that an individual defendant saw a particular historical document, a jury may reasonably infer that the individual defendant should have known the information conveyed in the document, especially given the manufacturers' frequent sharing of similar information.

Accordingly, for these reasons and the reasons stated in the Court's other relevant written Orders and oral rulings, the Court has overruled the defendants' blanket and document-specific objections to "historical documents." The Court will continue to apply this reasoning in every *Welding Fume* case.

- **Objection re: Testimony from Lincoln's 30(b)(6) Designee – SUSTAINED.**

Pursuant to Fed. R. Civ. P. 30(b)(6), defendant Lincoln Electric designated Carl Peters to testify on its behalf. Mr. Peters testified in the earlier bellwether trial of *Jowers*, and also took the witness stand two different times in this case. The first time Mr. Peters took the stand in *Cooley*, he was called by plaintiffs in their case-in-chief and questioned as if under cross-examination. During that examination, plaintiffs showed to Mr. Peters the deposition testimony of Lincoln Electric's CEO, John Stropki, where Mr. Stropki stated that Lincoln knew in the 1940s of the risk that manganese in welding fumes could cause neurological injury.⁴⁵ When asked during the *Cooley* trial whether Lincoln Electric stood by that testimony, Mr. Peters stated: "That's not the exact position of the company, so I guess I am taking it

⁴⁵ See trial tr. at 626 (Sept. 16, 2009).

back.”⁴⁶ The following colloquy then took place:

Q. Okay. Now, Mr. Peters, I have to ask, you don’t agree with what Mr. Stropki swore to; is that right? You think the company’s position is different?

A. I think the interpretation is different, yes. I had a discussion with John on that very issue just so I understood it.

MR. DAVIS: I object to that –

THE COURT: Wait. The jury will disregard that comment. Mr. Peters, you know you can’t talk about those kinds of things.⁴⁷

The basis for the Court’s instruction, of course, was that Mr. Peters’ basis for suggesting that Mr. Stropki’s testimony must be “interpreted,” in order to understand Lincoln Electric’s position, was inadmissible hearsay.

Because Mr. Peters was called by plaintiffs in their case-in-chief, defendants did not immediately have the opportunity to examine Mr. Peters, themselves. Defendants subsequently called Mr. Peters back to the witness stand during their own case, however, and asked the Court for permission to address the topic of Mr. Peter’s discussions with Mr. Stropki. Defendants argued that, because Mr. Peters was a 30(b)(6) witness, he was: (1) allowed (and even obligated) to ask other Lincoln Electric personnel for relevant information regarding corporate knowledge; and (2) allowed to then repeat this information at trial. Defendants argued, accordingly, that Mr. Peters should be allowed to repeat statements Mr. Stropki had recently made to him (when Mr. Peters was preparing to testify in *Cooley*) regarding whether and when Lincoln Electric came to know that manganese in welding fumes can cause brain damage.

The Court overruled defendants’ request that Mr. Peters be allowed to repeat statements he heard made by Mr. Stropki, or even to suggest it was his conversations with Mr. Stropki that had given him new

⁴⁶ *Id.* at 627.

⁴⁷ *Id.* at 634-35. The conversation between Mr. Peters and Mr. Stropki about which Mr. Peters alluded occurred long after Mr. Peters’ initial designation as Lincoln’s 30(b)(6) representative and long after Mr. Stropki’s deposition.

knowledge on the issue.⁴⁸ There were two related reasons behind the Court’s ruling. First, the fact that a witness is a 30(b)(6) designee does not create a hearsay exception allowing him to simply repeat statements made by corporate officers and employees, if those statements are offered for their truth. As defendants pointed out, Rule 30(b)(6) does “permit[] designated persons without personal knowledge to testify on behalf of a corporation on matters within the corporation’s knowledge;”⁴⁹ further, a corporate designee may testify about not only a corporation’s knowledge but also its subjective beliefs.⁵⁰ These principles are designed to relieve burdens imposed on corporate defendants; however, they do not change the rule that a 30(b)(6) designee cannot “offer any testimony . . . at trial . . . to the extent that information was hearsay not falling within one of the authorized exceptions.”⁵¹ Having investigated the facts known to and beliefs held by Lincoln Electric and its employees, the admissible testimony Mr. Peters could offer on those subjects at trial still remained limited by the Federal Rules of Evidence.

Second, the rule that a 30(b)(6) designee cannot offer hearsay testimony holds especially true when there is no independent evidentiary basis that might otherwise prove the truth of the hearsay, such as

⁴⁸ *Id.* at 2971-72 (Oct. 1, 2009).

⁴⁹ *McLellan Highway Corp. v. United States*, 95 F.Supp.2d 1, 10 (D. Mass. 2000).

⁵⁰ See *Brazos River Authority v. GE Ionics, Inc.*, 469 F.3d 416, 433 (5th Cir. 2006) (“[A] rule 30(b)(6) designee does not give his personal opinions, but presents the corporation’s ‘position’ on the topic. When a corporation produces an employee pursuant to a rule 30(b)(6) notice, it represents that the employee has the authority to speak on behalf of the corporation with respect to the areas within the notice of deposition. This extends not only to facts, but also to subjective beliefs and opinions.”) (citations omitted).

⁵¹ *Id.* at 435.

corroborating testimony from the hearsay declarant.⁵² Conceivably, admission of Mr. Peters' statements regarding his conversations with Mr. Stropki, under the rubric of corporate knowledge, would be harmless if Mr. Stropki also testified, or if documents showed the accuracy of Mr. Peters' recollection. But defendants did not call Mr. Stropki, nor offer any documents erasing hearsay concerns. Thus, there was no mechanism, such as cross-examination of Mr. Stropki, that would allow plaintiffs to test Mr. Peters' recitation of what Mr. Stropki allegedly said and believed. Without an opportunity to confront Mr. Stropki, plaintiffs' objection that Mr. Peters should not be allowed to repeat Mr. Stropki's statements is well-taken.

IT IS SO ORDERED.

/s/ Kathleen M. O'Malley
KATHLEEN McDONALD O'MALLEY
UNITED STATES DISTRICT JUDGE

DATED: March 10, 2010

⁵² *Century Pacific, Inc. v. Hilton Hotels Corp.*, 528 F.Supp.2d 206, 215 n.5 (S.D.N.Y. 2007) (“Numerous courts have rejected hearsay evidence by a corporate deponent when there is no additional evidence to support the statements.”).